



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBH9928-2
Job Sheet 172104



000 802
811

Part No: RBH9928-2

Job Qty: 3 ea **4**

Part Name: Tab Bender with Plastic Block



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 2/12/18

Job Tracking No:

Due Date: 2/23/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBH9928-2 Rev K IPP Rev A 17.11.13 New Issue DP Verify DD/IPP Rev B 17.11.20 DWG Rev K DP
Verify DD IPP Rev.C 18.01.18 Updated process, all done under assy. JFS Verified by: DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	3 Ea		2/22/18	0.00	0.00	Start Up Machining-4		MCL
100	Bandsaw	3 pcs		2/22/18	0.00	0.08	Bandsaw1		
110	Mori Seiki	3 pcs		2/22/18	0.00	1.50	MORI NV5000-1		
120	QC	3 pcs		2/22/18	0.00	0.00	QC2 Machining-5		
130	QC	3 pcs		2/22/18	0.00	0.00	QC8-7		
140	Brake NC	3 pcs		2/22/18	0.00	1.50	Brake NC 1		
155	QC	3 pcs		2/22/18	0.00	0.00	QC5		
165	Outsource	3 pcs		2/22/18	0.00	0.00	Outsource4		
175	Packaging	3 pcs		2/22/18	0.00	0.00	Packaging2		
180	QC	3 pcs		2/22/18	0.00	0.00	QC6		
190	Small Fab	3 pcs		2/23/18	0.00	1.50	Small Fab		MCL
200	QC	3 pcs		2/23/18	0.00	0.00	QC5		38
210	Packaging	3 pcs		2/23/18	0.00	0.00	Packaging3		9-89
220	QC21-SA	3 Ea		2/23/18	0.00	0.00	QC21		DA8

Part Op 100 - Cut blanks to 8.00"

Descriptions: 110 - 1-Machine RBH9928-2-1 & RBH9928-2-3 as per folio FB676 FOLIO REV: _____ DWG REV: _____

2-Deburr NOTE; ***Machine both parts at same time***

130 - Engrave T/N number ONLY (RBH9928-2) using Marktronic engraver as per DWG.

140 - -Form RBH9928-2-1 as per DWG. -Remove bending marks -Broach RBH9928-2-3 as per DWG. -Tumble to remove buffer marks

165 - -Issue P/O to ATG : PO _____ ***ENSURE TO SHIP BOTH PARTS*** -ANODIZE COLOR RED, PER IAW MIL-A-8625 TYPE-2 CLASS-2, Water sealant -Certificate of Conformity is required

190 - -Assemble as per DWG. Sheet 1

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
M6061T6S0.250X6.250	6061-T651 Sheet 0.250" Thick Plate x 6.250" Wide	1.9980 ft (.666 ea)	90-Start up Operation	
92356A247	Carriage Bolt	6 Ea (2 ea)	190-Small Fab	
96659A104	Washer	6 Ea (2 ea)	190-Small Fab	
KKT-11A	Knurled Knob	6 Ea (2 ea)	190-Small Fab	

RBH 9928-2-1
RBH 9928-2-3

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval																																																										
Description Work Order Deviation				Disposition				Completed By																																																									
								Lead hand / Supervisor Approval Verification																																																									
								QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____			
Misidentified ☐	Past Due ☐																																																																

90-Start up Operation	M6061T6S0.250X6.250	2	7	0
190-Small Fab	92356A247	6	50	0
	96659A104	6	100	0
	KKT-11A	6	30	0

Part Specifications

Specifications could not be found.

Plex 2/12/18 2:30 PM Dart.lajeunesse.marie

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

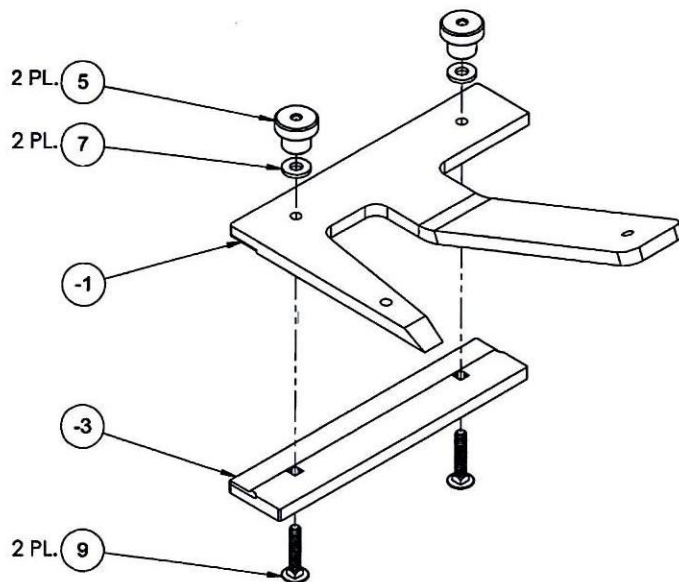
QA Closed: _____ Date: _____

Work Order update only ☐

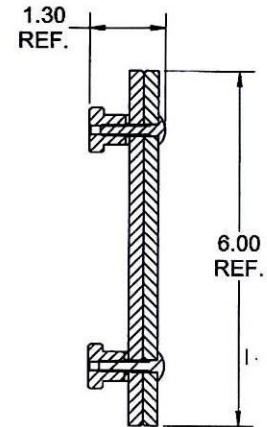
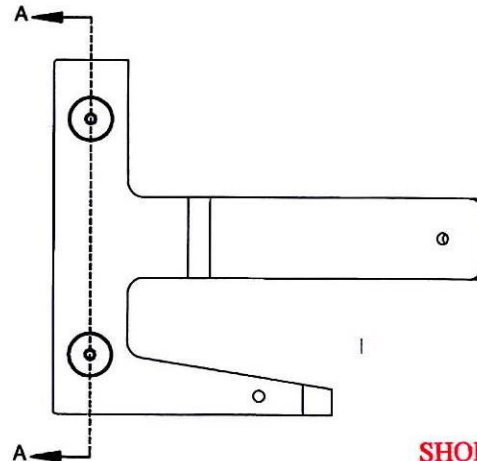
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

ITEM #	QTY	PART #	TITLE	PG
-1	1	RBH9928-2-1	TAB BENDER	2
-3	1	RBH9928-2-3	CLAMP	3
5	2	ESSENTRA #KKCT-11A	FEMALE KNOB KNURLED	-
7	2	McMaster#96658A104	# 10 STAINLESS STEEL SAE FLAT WASHER	-
9	2	McMaster#92356A247	SQUARE NECK CARRIAGE BOLT #10-24 X 1" LG.	-

REV.	DESCRIPTION	ECN #	DATE	BY	APPROVED
9	SEPERATED FROM RBH9928	-	6/5/13	BIM	EB
10	-1 CHD DISTANCE OF RADIUS FROM .500 (X2) TO .670 (X2). -3 CHD DISTANCE OF RADIUS FROM .625 (X2) TO .670 (X2). CHD NON-CRITICAL DIMENSION PRECISION FROM .XXX TO .XX.	-	7/31/13	RJC	GE
K	TEMPLATE UPDATED AS PER HAWKESBURY STANDARDS. -3 DRILL AND BROACH DIMENSION CHANGED, -1 & -3 RADIUS ALONG THE EDGE DIMENSIONS ADDED, TOLERANCE ADDED ON -1 & -3	17-669	17.09.22	VM	WM

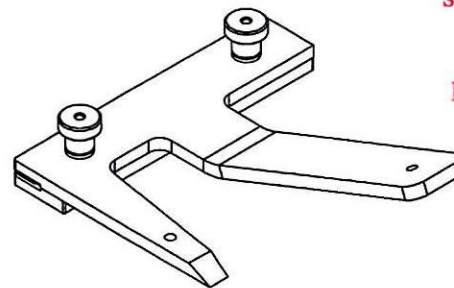


RBH9928-2 TAB BENDER



SECTION A-A

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 17C108 18-02-12



NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) HEAT TREAT: N/A/N/A
- 4) SPEC: N/A
- 5) BREAK ALL SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) USED IN ASSEMBLY RBH9982

DART AEROSPACE Hawkesbury, Ontario, Canada	
TITLE TAB BENDER	
DATE NO.	REV K
RBH9928-2	
DESIGN BY: VM 9/22/2017	XXX 3/16 FRACTIONS & 1/8 ANGLES 3/4"
DRAWN BY: WM 11/15/2017	XX 3/16 SURFACES = 125
CHECKED: WM 11/15/2017	1. DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED
INFO. APPR: DP 11/16/2017	2. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
APPROVED: WM 11/16/2017	3. DIMENSIONAL LIMITS APPLY AFTER PLATING
DATE: 11/15/2017	
SCALE: NTS	WEIGHT: N/A
SHEET 1 OF 3	
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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		OTHER : _____					